Oxford Cambridge and RSA

OCR-set Assignment

Sample Assessment Material

OCR Level 3 Alternative Academic Qualification Cambridge Advanced National in Application Development

Unit F163: Game development

Scenario Title: Retro game with a modern twist

Valid for assessment from September 20XX to 20XX.
For use by students beginning the qualification in September 20XX.

This is a sample OCR-set assignment which should only be used for practice**.**

This assignment **must not** be used for live assessment of students.

The live assignments will be available on our secure website, 'Teach Cambridge'.

The OCR administrative codes linked to this unit are:

- unit entry code F163
- certification code H129

The regulated qualification number linked to this unit is: 610/3975/5

Duration

About 15 hours of supervised time (GLH)
(work that **must** be completed under teacher supervised conditions)

SAMPLE

All this material **can** be photocopied. Any photocopying will be done under the terms of the Copyright Designs and Patents Act 1988 solely for the purposes of assessment.

Contents

Information and instructions for Teachers....3
Using this assignment....3
Tasks for students and assessment criteria....5
Scenario....5
Task 1....6
Task 2....8
Task 3....11
Template for test table....13
NEA command words....14

SAMPLE

 © OCR 2025

Information and instructions for Teachers

Using this assignment

This assignment provides a scenario and set of related tasks that reflect the development of a game prototype based on a set of client requirements.

You can give this to students on or after 1 June 202X to help them understand it before they start using it for assessment. The dates for which students can use it for assessment are shown on the front cover.

The assignment:

- Is written so that students have the opportunity to meet the requirements of all assessment criteria for the unit.
- Will tell students if their evidence must be in a specific format. If the task does not specify a format, students can choose the format to use.
- **Must** be completed under teacher supervision. Any unsupervised time allowed will be stated below and explained in the assessment guidance.

We have estimated that this assignment will take about 15 hours of supervised time to complete. Students should need approximately:

- 5 hours to complete Task 1.
- 8 hours to complete Task 2.
- 2 hours to complete Task 3.

You **must**:

- Use an OCR-set assignment for summative assessment of students.
- Familiarise yourself with the assessment criteria and assessment guidance for the tasks. These are given at the end of each student task. They are also with the unit content in **Section 5** of the Specification.
  Assessment guidance is only given where additional information is needed. There might not be assessment guidance for each criterion.
- Make sure students understand that the assessment criteria and assessment guidance tell them in detail what to do in each task.
- Read and understand **all** the rules and guidance in **Section 7** of the Specification **before** your students start the set assignments.
- Make sure that your students complete the tasks and that you assess the tasks fully in line with the rules and guidance in **Section 7** of the Specification.
- Give your students the **Application Development Student guide to NEA assignments before** they start the assignments.

You **must not**:

© OCR 2025

SAMPLE

- Use live OCR-set assignments for practice or formative assessment. This sample assessment material **can** be used for practice or formative assessment.
- Use this sample assessment material for live assessment of students.
- Allow group work for **any** task in this assignment.
- Change any part of the OCR-set assignments or assessment criteria.

SAMPLE

© OCR 2025

Pages 1-4 are for teachers only. Please do **not** give **Pages 1-4** to your students.

You can give **any** or **all** of the pages **that follow** to your students.

SAMPLE

© OCR 2025

Tasks for students and assessment criteria

Unit F163: Game development

Scenario Title: Retro game with a modern twist

Valid for assessment from September 20XX to 20XX.
For use by students beginning the qualification in September 20XX.

Scenario

You work as a freelance games developer and have been commissioned by a popular games company to develop a new game.

The client has specified the game must:

- Appeal to an older audience of age 50+.
- Have a 'retro' feel but with a modern twist.
- Be based on an original 2D platform game from the 1980s or 1990s, but be different in its look and feel so that it is more like a modern game.
- Have a rating of PEGI 16 or below.

The client has also specified that although game functionality may be similar, your game must have some new features that differentiates it from the original game. It must not be an exact copy of the original game.

Your game should include features that make it appealing and engaging for the intended audience. It should increase in level of difficulty as players move through at least three different levels or scenes.

SAMPLE

 © OCR 2025

Task 1
Planning and designing the high-fidelity game prototype

Topic Areas 1, 2 and 4 are assessed in this task.

The task is:

Plan and design the game prototype that you have been commissioned to develop.

You will:

- Plan and design the game prototype.
- Describe how the game prototype will be tested.

Your evidence **must** include:

- A game design document.
- Planning and design documentation.
- Written evidence.

Use the assessment criteria below to tell you what you need to do in more detail.

<table>
<tr><th>Pass</th><th>Merit</th><th>Distinction</th></tr>
<tr><td>P1: Describe a concept for a game prototype that meets the client requirements as detailed in the scenario.
(PO2)</td><td></td><td rowspan="3">D1: Discuss how the planned game and gameplay elements maintain player interest and engagement in the game prototype.
(PO3)</td></tr>
<tr><td>P2: Identify the assets required for the game prototype.
(PO2)</td><td rowspan="2">M1: Explain how assets are used in combination in the game prototype.
(PO2)</td></tr>
<tr><td>P3: Design game visuals appropriate for the game prototype.
(PO4)</td></tr>
<tr><td>P4: Describe the game mechanics to be used in the game prototype.
(PO2)</td><td>M2: Plan game mechanics appropriate for the game prototype using game planning tools.
(PO4)</td><td>D2: Discuss how the planned game mechanics are used in combination to maintain player interest and engagement in the game prototype.
(PO3)</td></tr>
<tr><td>P5: Describe how the game prototype will be</td><td>M3: Justify the appropriateness of the</td><td></td></tr>
</table>

SAMPLE

 © OCR 2025

tested. (PO2)	testing. (PO3)	

Assessment guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P1	• Students **must** describe a concept for a game prototype which meets **all** the client requirements. The description of the concept **must** include the content in Topic Area 1.2.1.
P2	• Students **must** identify the essential assets required for the game prototype. To achieve this criterion, students are not required to identify all non-essential assets. This assessment criterion **could** be evidenced in an assets list and/or via the design(s) for the game visuals (P3).
P3	• Students **must** design the game visuals for the game prototype using at least **one** of the game design tools in Topic Area 2.1.2. The design(s) **must** contain enough detail for them to be interpreted by someone who hasn't seen them before.
P4	• Students **must** describe the game mechanics that they will use in the game prototype that are essential to the gameplay.
P5	• Students **must** describe the testing methods and testing types they will use to test the game prototype and the elements of the game prototype they intend to test. The description of how the game prototype will be tested **could** include the content in Topic Area 4.1.
M1	• Students **must** explain how the essential assets identified in P2 will be used in the game prototype. Students **must** explain which of the essential assets will be static and which will work in combination. This assessment criterion **could** be evidenced in an assets list and/or via annotations on the design(s) for the game visuals.
M2	• Students **must** plan **all** the game mechanics detailed in P4 using at least **one** of the game planning tools in Topic Area 2.1.2. Where students do not achieve P4, it is still possible to achieve M2. The planning **must** contain enough detail for it to be interpreted by someone who hasn't seen them before.
M3	• Students **must** justify the approach to testing detailed in P5.
D1	• Students **could** include the content in Topic Areas 1.2.2 and 1.2.3 in the discussion.
D2	• Students **could** include the content in Topic Area 1.2.4 in the

SAMPLE

 © OCR 2025

	discussion.

SAMPLE

© OCR 2025

Task 2
Creating the high-fidelity game prototype

Topic Areas 1 and 3 are assessed in this task.

The task is:

Create the game prototype that you planned and designed in **Task 1**.

You will:

- Source and prepare assets for use in the game prototype.
- Use game engine tools and/or programming techniques to create the game prototype.

Your evidence **must** include:

- An export of the game prototype which allows it to be played without installing any specialist software **or** video/screen recordings demonstrating the game prototype.

Use the assessment criteria below to tell you what you need to do in more detail.

<table>
<tr><th>Pass</th><th>Merit</th><th>Distinction</th></tr>
<tr><td>P6: Source assets appropriate for use in the game prototype.
(PO4)</td><td rowspan="2">M4: Prepare assets appropriately for use in the game prototype.
(PO4)</td><td rowspan="2"></td></tr>
<tr><td>P7: Create an appropriate game environment using game engine tools.
(PO4)</td></tr>
<tr><td>P8: Implement character and/or object movement and navigation appropriate for the game prototype.
(PO4)</td><td rowspan="2">M5: Implement collision detection appropriate for the game prototype.
(PO4)</td><td rowspan="2">D3: Create a cohesive game prototype combining game environment, assets and mechanics.
(PO4)</td></tr>
<tr><td>P9: Implement game play controls appropriate for the game prototype.
(PO4)</td></tr>
<tr><td>P10: Implement game start and end mechanisms appropriate for the game prototype.
(PO4)</td><td>M6: Implement scoring and timing mechanisms appropriate for the game prototype.
(PO4)</td><td>D4: Implement player interaction and feedback appropriate for the game prototype.
(PO4)</td></tr>
</table>

SAMPLE

© OCR 2025

SAMPLE

 © OCR 2025

Assessment guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
Task 2	• Ideally students will create the game prototype planned and designed in **Task 1**. However, if students deviate from the plan(s) and/or design(s) they should not be penalised when assessing **Task 2**. • To confirm assessment decisions made for this task, the OCR assessor will need to be able to see the final game prototype. Therefore, students **must** provide either: o The final game prototype in a format which allows it to be played without the need to install any specialist software and instructions on how to play the game. o Video/screen recordings of the final game prototype being demonstrated. This is especially useful if the skill level required to play the game is high.
P6	• Students **must** source assets for use in the game prototype that are appropriate for the game concept detailed in P1. The final game prototype will be sufficient evidence for this assessment criterion.
P7	• Using assets sourced in P6, students **must** create a game environment (screens/rooms/levels/stage), appropriate for the game concept detailed in P1. Students **must** use the game engine tools in Topic Area 3.2. The final game prototype will be sufficient evidence for this assessment criterion.
P8	• Students **must** add character and/or object movement and navigation to the game prototype, so the game functions as intended. Students **must** use the game engine tools and/or programming techniques in Topic Area 3.2. The final game prototype will be sufficient evidence for this assessment criterion.
P9	• Students **must** add game play controls to the game prototype, so the game functions as intended. Students **must** use the game engine tools and/or programming techniques in Topic Area 3.2. The final game prototype will be sufficient evidence for this assessment criterion.
P10	• Students **must** add game start and end mechanisms to the game prototype, so the game functions as intended. Students **must** use the game engine tools and/or programming techniques in Topic Area 3.2. The final game prototype will be sufficient evidence for this assessment criterion.
M4	• Students **must** prepare **all** assets sourced in P6, so they are

SAMPLE

 © OCR 2025

	appropriate for use in the game prototype. Topic Area 3.1 has examples of techniques students could use to prepare assets**.** Students **could** prepare assets in the game engine software or in external graphic software. The final game prototype will be sufficient evidence for this assessment criterion.
M5	• Students **must** add collision detection to the game prototype, so the game functions as intended. Students **must** use the game engine tools and/or programming techniques in Topic Area 3.2. The final game prototype will be sufficient evidence for this assessment criterion.
M6	• Students **must** add scoring and timing mechanisms to the game prototype, so the game functions as intended. Students **must** use the game engine tools and/or programming techniques in Topic Area 3.2. The final game prototype will be sufficient evidence for this assessment criterion.
D3	• Students **must** create a game prototype where all components of the game work, and fit, together. The final game prototype will be sufficient evidence for this assessment criterion.
D4	• Students **must** add player interaction and player feedback to the game prototype, so the game functions as intended. Students **must** use the game engine tools and/or programming techniques in Topic Area 3.2. The final game prototype will be sufficient evidence for this assessment criterion.

SAMPLE

 © OCR 2025

Task 3
Testing and reviewing the high-fidelity game prototype

Topic Areas 4 and 5 are assessed in this task.

The task is:

Test and review the game prototype you created in **Task 2**.

You will:

- Test the game prototype using the testing described in **Task 1**.
- Review the game prototype.

Your evidence **must** include:

- Documented test results.
- Written evidence.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P11: Test the game prototype and document results. (PO4)	**M7: Analyse** test results documenting any required remedial action. (PO3)	**D5: Discuss** potential improvements and further development opportunities for the game prototype. (PO3)
P12: Assess the suitability of the game prototype for meeting the requirements. (PO3)		

SAMPLE

© OCR 2025

Assessment guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P11	• Students **must** test the game prototype and document results. Ideally students will use the approach described and justified in **Task 1**. However, if students deviate from the proposed testing they should not be penalised. • Students **must** have evidence of the actual test results. For example, screen shots, photographs or video/screen recordings.
P12	• Students **must** assess the suitability of the game prototype for meeting the requirements in Topic Area 5.1.
M7	• Students **must** analyse the test results generated in P11 and explain any remedial action required to resolve the issues found during testing. Students are not expected to fix errors found in the game prototype during final testing.
D5	• Having assessed the suitability of the game prototype (P12) and analysed test results (M7), students **must** discuss potential improvements and further developments to the game prototype.

SAMPLE

 © OCR 2025

Template for test table

Test number	Test type	Test description	Test data	Expected result	Actual result	Remedial action required

SAMPLE

© OCR 2023

NEA command words

The table below shows the command words that may be used in the NEA assignments and/or assessment criteria.

Command Word	Meaning
Adapt	• Change to make suitable for a new use or purpose
Analyse	• Separate or break down information into parts and identify their characteristics or elements • Explain the different elements of a topic or argument and make reasoned comments • Explain the impacts of actions using a logical chain of reasoning
Assess	• Offer a reasoned judgement of the standard or quality of situations or skills. The reasoned judgement is informed by relevant facts
Calculate	• Work out the numerical value. Show your working unless otherwise stated
Classify	• Arrange in categories according to shared qualities or characteristics
Compare	• Give an account of the similarities and differences between two or more items, situations or actions.
Conclude	• Judge or decide something
Describe	• Give an account that includes the relevant characteristics, qualities or events
Discuss (how/whether/etc)	• Present, analyse and evaluate relevant points (for example, for/against an argument) to make a reasoned judgement
Evaluate	• Make a reasoned qualitative judgement considering different factors and using available knowledge/experience
Examine	• To look at, inspect, or scrutinise carefully, or in detail
Explain	• Give reasons for and/or causes of something • Make something clear by describing and/or giving information
Interpret	• Translate information into recognisable form • Convey one's understanding to others, e.g. in a performance
Investigate	• Inquire into (a situation or problem)
Justify	• Give valid reasons for offering an opinion or reaching a conclusion
Research	• Do detailed study in order to discover (new) information or reach a (new) understanding
Summarise	• Express the most important facts or ideas about something in a short and clear form

We might also use other command words, but these will be:

- Commonly used words whose meaning will be made clear from the context in which they are used
- Subject specific words drawn from the unit content.

SAMPLE